

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new Traffic Control Signal with street lighting and interconnect at the intersection of in MD 246 and Westbury Blvd / Carver School Blvd St. Mary's County. Advance Hazard Identification Beacons shall be placed along the east and west legs of MD 246. MD 246 is assumed to run on east-west direction. Video detection shall be used on the side streets and for main line left turns.

II. INTERSECTION OPERATION

- The Intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 246 approaches running concurrently. Exclusive/Permissive left turn phases shall be provided for both approaches of MD 246. A pedestrian phase with pushbutton actuation shall be provided across the west leg of MD 246. The pedestrian phases across Westbury Blvd / Carver School Blvd shall be on recall. The Westbury Blvd / Carver School Blvd approaches shall operate as a minor street split phase.
- A full-traffic-actuated, eight-phase controller with one(1) four channel, rack mount loop detector amplifier, video interface equipment, service utility equipment and all other necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST
EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9001	Detector rack power supply (To be installed by SHA forces)	1 EA
9012	2-circuit flasher unit and time base unit with a dimmer switch	2 EA
9016	Detector amplifier 4-channel rack mount. (to be installed by signal shop)	1 EA
9037	Cabinet "6" type - pole mount	2 EA
9042	Controller ASC II with telemetry	1 EA
9044	Controller cabinet, size "6" - base mount	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9570	Sheet aluminum signs to consist of: (ground mount)	18 SF
	W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") ground mounted with hardware.	2 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	225F
	D3-2 "(arrow) Westbury BLVD / Carver School BLVD (arrow)" (variable x 32") mast arm mounted	1 EA
	D3-2 "(arrow) Carver School BLVD / Westbury BLVD (arrow)" (variable x 32") mast arm mounted	1 EA
	D3-2 "Great Mills RD" sign, (variable x 16") mast arm mount.	2 EA
	R2-1 "SPEED LIMIT 40 MPH" (30"x24") pole mounted	2 EA
	R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") mast arm mount.	2 EA
	R3-6 "LEFT TURN AND THRU" sign, (30" x 36") mast arm mount.	1 EA
	R3-5L "LEFT TURN ONLY" sign, (30" x 36") mast arm mount.	1 EA
	S1-1A "SCHOOL CROSSING AHEAD (SYMBOLIC)" (36" x 36") pole mounted	2 EA
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted. M3-4 "WEST" (30"x15") M1-5 "MD 246" (48"x36") M6-1 "left arrow" (30"x24") pole mounted	1 EA
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-2 "EAST" (24"x12") M1-5 "MD 246" (30"x24") M6-1 "right arrow" (21"x15") pole mounted	1 EA
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted. M3-2 "EAST" (30"x15") M1-5 "MD 246" (48"x36") M6-1 "left arrow" (30"x24") pole mounted	1 EA
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-4 "WEST" (24"x12") M1-5 "MD 246" (30"x24") M6-1 "right arrow" (21"x15") pole mounted	1 EA

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	3 EA
2001	Class 2 Excavation, INCL FOR SW REMOVAL	3.5 C.Y.
2002	Test Pit Excavation	7 C.Y.
5004	12" white heat applied permanent preformed thermoplastic pavement marking.	620 L.F.
5005	24" white heat applied permanent preformed thermoplastic pavement marking.	140 L.F.
5008	Remove existing pavement markings - any width.	60 L.F.
6001	Furnish and install depressed curb and gutter.	10 L.F.
6002	Standard type A combination curb and gutter 12" gutter pan 8" depth.	50 L.F.
6004	4" concrete sidewalk.	245 S.F.
8001	Pre-manufactured camera to controller (250' length) cable	2 EA
8003	Pre-manufactured camera to controller (500' length) cable	2 EA
8006	Cut, clean, galvanize and cap traffic signal structure.	3 EA
8010	Furnish and install 12" pedestrian signal head section	8 EA
8011	Furnish and install 12" vehicular traffic signal head section	36 EA
8013	Furnish and install 15' bracket arm for traffic signal structure.	1 EA
8014	Furnish and install 250 watt HPS Luminaire with photocell.	1 EA
8015	Furnish and install 3" weatherhead.	2 EA
8016	Furnish and install 3M opticom #764 discrimination module-4 channel.	1 EA
8018	Furnish and install 3M opticom #721 detector eye	1 EA
8019	Furnish and install 8" vehicular traffic signal head section.	12 EA
8020	Furnish and install Control and Distribution Equipment for signals	1 EA
8022	Furnish and install 27' mast arm pole and 50' mast arm.	4 EA
8030	Furnish and install breakaway pedestal pole (any size).	2 EA
8032	Pedestrian pushbutton and R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS GREAT MILLS RD".)	2 EA
8043	Furnish and install non-invasive probe set with 1000' lead-in cable.	2 EA
8044	Furnish and install non-invasive probe set with 500' lead-in cable.	2 EA
8049	Furnish and install video detector camera.	4 EA
8051	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trench.	1980 L.F.
8052	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	285 L.F.
8053	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - trench.	30 L.F.
8054	Furnish and install 12-pair communication cable, self-supporting (overhead).	3500 L.F.
8056	Furnish and install 4-conductor opticom detector cable.	250 L.F.
8057	Furnish and install concrete for signal foundation.	16 C.Y.
8059	Furnish and install wood sign supports 4" x 6".	35 L.F.
8060	Furnish and install No. 6 AWG stranded bare copper ground wire.	600 L.F.
8064	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	210 L.F.

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8069	Metered service pedestal.	2 EA
8070	Furnish and install electrical cable 1-conductor No. 4 AWG THHN/THWN.	30 L.F.
8071	Furnish and install electrical cable 1-conductor No. 8 AWG - THHN/THWN.	60 L.F.
8072	Furnish and install electrical handhole.	16 EA
8074	Install ground mounted sign.	18 S.F.
8075	Install overhead sign.	225 S.F.
8077	Furnish and install 2 1/2" electrical conduit schedule 80 polyvinyl chloride - riser.	100 L.F.
8078	Furnish and install connector kit - Type 1.	2 EA
8079	Furnish and install connector kit - Type 2.	2 EA
8080	Furnish and install ground rod - 3/4" x 10'.	9 EA
8082	Furnish and install electrical cable - 2 conductor (No. 14 AWG).	335 L.F.
8083	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	400 L.F.
8084	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	510 L.F.
8085	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	1930 L.F.
8086	Furnish and install tray cable - 2 conductor (No. 12 AWG).	265 L.F.
8091	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trench.	25 L.F.
8092	Install controller and cabinet pole mount.	2 EA
8093	Install controller and cabinet base mount.	1 EA
8145A	Furnish and install detectable Sati-Trax Mats	32 S.F.

The contact persons for District #5 are as follows:

Ms. Kim Tran
Assistant District Engineer - Traffic
Phone: (410) 841-1003

Mr. Charles George
Assistant District Engineer - Maintenance
Phone: (410) 841-1002

Mr. John Mays
Assistant District Engineer - Utility
Phone: (410) 841-1005

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative is:
Steve McGee of SMECO.



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 246' @ WESTBURY BLVD./CARVER SCHOOL BLVD.

SHA# SM05A810681058 TID# K10054-47M

DRAWN BY: ROB CIOCHINI	F.A.P. NO. XX1065485	TS NO. 4294-GT 2	SHEET NO. 5 OF 5
CHECKED BY: J ALLEN	S.H.A. NO. ST MARY'S	T.J.M.S. NO. F838	
SCALE: NONE	COUNTY: 18024601.48	LOG MILE: 3-18-04	
DATE: 3-18-04			